contacting the sample with a labeled detection probe, wherein said detection probe comprises at least two molecules of a detectable label, for sufficient time to form an antigen-multispecific molecule-probe complex; and

detecting the labels imparted by the labeled detection probe to the antigen-multispecific molecule-probe complex.

3. The method of claim 2, wherein said tumor antigen is associated with breast, prostate, brain, liver, kidney, colon, pancreatic, stomach, or lung cancer.

4. The method of claim 2, wherein said viral antigens are associated with hepatitis type A, hepatitis type B, hepatitis type C, influenza, varicella, adenovirus, herpes simplex type I (HSV-I), herpes simplex type II (HSV-II), rinderpest, rhinovirus, echovirus, rotavirus, respiratory syncytial virus, papilloma virus, papova virus, cytomegalovirus, echinovirus, arbovirus, hantavirus, coxsachie virus, mumps virus, measles virus, rubella virus, polio virus, human immunodeficiency virus type I (HIV-I), and human immunodeficiency virus type II (HIV-II), picornaviridae, enteroviruses, caliciviridae, Norwalk viruses, Dengue virus, alphaviruses, flaviviruses, coronaviruses, rabies virus, Marburg viruses, ebola viruses, parainfluenza virus, orthomyxoviruses, bunyaviruses, arenaviruses, reoviruses, rotaviruses, orbiviruses, human T cell leukemia virus type I, human T cell leukemia virus type II, simian immunodeficiency virus, lentiviruses, polyomaviruses, parvoviruses, Epstein-Barr virus, human herpes virus-6, cercopithecine herpes virus 1 (B virus), and poxviruses.

5. The method of claim 2, wherein said hormone is thyroid stimulating hormone (TSR) or human chorionic gonadotrophin (hCG).

6. The method of claim 2, wherein said plasma protein is a fibrin degradation product (FDP), a C-reactive protein (CRP), a carcinoembryonic protein, α-fetoprotein (AFP), or a carcinoembryonic antigen (CEA).

7. The method of claim 2, wherein said hapten is angiotensin I, vasopressin, somatostatin, atrial natriuretic hormone, endoserine, luteinizing hormone releasing hormone (LH-RH), kassinin or other peptides.

8. The method of claim 2, wherein said steroid is progesterone, testosterone, cortisol or another steroid.

11. The method of claim 10, wherein said sample from a human patient is a tissue, blood, saliva, urine, or plasma sample.

13. The method of claim 1, wherein the method can detect about 2×10^{-16} moles of the antigen present in the sample.

14. The method of claim 1, wherein the method can detect about 2×10^{-18} moles of the antigen present in the sample.

15. The method of claim 1, wherein the method can detect about 2×10^{-21} moles of the antigen present in the sample.

23. The method of claim 1, wherein said detection probe is labeled with at least 9 molecules of a detectable label.

24. The method of claim 1, wherein said detection probe is labeled with at least 12 molecules of a detectable label.

25. The method of claim 1, wherein said detection probe is labeled with at least 18 molecules of a detectable label.

56. The method of claim 1, wherein said detection probe comprises at least one DTPA molecule wherein said multispecific molecule in said antigen-multispecific molecule-probe complex interacts with said DTPA molecule.

REMARKS

Claims 1-25 and 56 are presently pending. Claims 26-50 have been canceled without prejudice. Applicants fully reserve their rights to prosecute the subject matter of any canceled claim in one or more continuation, continuation-in-part or divisional applications. Claims 1, 3-8, 11, 13-15, and 23-25 have been amended to more particularly